

Atlantic Richfield Company

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July 7, 2010

CERTIFIED – RETURN RECEIPT REQUESTED

Ms. Nadia Hollan
Remedial Project Manager
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street, SFD-8-2
San Francisco, CA 94105

Subject: June 2010 Monthly Report, Yerington Mine Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study (RI/FS), EPA Docket No. 9-2007-0005; Administrative Order on Consent, EPA Docket No. 09-2009-0010

Dear Ms. Hollan:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared the following monthly report for RI/FS and removal action activities at the Yerington Mine Site (Site) during June 2010.

June 2010 Activities

Site O&M and Security

- Continued routine Site O&M, security and bird deterrent activities including operation of the propane cannons for the Arimetco ponds (with the exception of the VLT Pond). The bird guard towers were kept active, and replacement voltage regulators for these units were ordered. Initiated a revised bird mitigation schedule that includes a ten-minute stop at each of three designated observation points, three times per day.
- PWS evaporation pond levels: North Cell 0.0 feet; Middle Cell = 0.0 feet; South Cell 0.0 feet.
- Arimetco heap leach fluid management system (FMS): 1) total estimated gallons transferred from VLTSP Pond to the FMS Evaporation Pond = approximately 114,500 gallons; slot sediment pond (SSP) to the FMS Evaporation Pond = approximately 165,000 gallons. Phase 1 Pond to Evaporation Pond = 0 gallons; 2) Pond levels: Phase 1 Pond = 3.5 feet; FMS Evaporation Pond = 5.75 feet; VLT Pond = 13.75 feet; Slot 2 Pond = 15.50 feet.
- No measurable precipitation was recorded.
- Continued monitoring the evaporation pan located near PW6.
- A strand of cable was added to the bottom of the fence adjacent to the front gate to lessen the possibility of lifting the chain link and crawling under the fence.
- New speed limit signs were installed at the main and north gates along with signage reminding drivers to proceed slowly through the area around the shops.
- Security patrols of the perimeter fence were conducted, and signs used for target practice were replaced, as needed.

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June 2010 Activities - Continued

Other Site Activities

- EPA and Environmental Quality Management (EQM) personnel completed removal actions. EPA and EQM also conducted an evaluation of methods to improve evaporation in the FMS pond.

Site Characterization

- Site-wide monthly groundwater elevation measurements were obtained June 30-July 2.
- A pit lake water elevation of 4221.96 feet amsl was recorded on June 28 from the pressure transducer, an increase of 0.32 feet since May 27. The pit lake elevation has increased 3.42 feet since June 28, 2009.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation.
- Provided a database review for EPA and project stakeholders on June 2.
- Continued work on the revised CSM, including responses to EPA and YPT comments.
- No changes to the bottled water program occurred in June.
- Submitted the 1Q 2010 Domestic Well Monitoring Report (DWMR) on June 2. Initiated revisions to the Domestic Well Monitoring Plan (QAPP Revision) pursuant to comments received from EPA dated June 15, 2010. Continued seeking access agreements from domestic well owners.
- Submitted the 1Q 2010 Groundwater Monitoring Report (GMR) on June 11.
- Completed the PWS aquifer testing program and continued the analysis of aquifer test data.
- Continued the 2010 monitor well installation program (see attached progress updates). Received comments from EPA on June 30 regarding the scopes of work for the 2010 monitor well installation and ag fields groundwater investigations.
- Continued discussions with EPA regarding aquifer solids testing procedures, and submitted a draft work plan for EPA review on June 21.
- Continued work on the Draft Process Areas Vadose Zone and Groundwater Characterization Work Plan, including a review of Site archives for subsurface features (dry wells and utilities).
- Attended a Groundwater Technical Meeting on June 24.
- Continued Site wildlife surveys, data management and wildlife observation reports.

AOC Removal Actions

- Conducted a topographic survey of the PWS evaporation pond north cell in anticipation of re-lining this cell. In a letter dated June 28, 2010, EPA: 1) indicated that this project will be postponed pending additional review of groundwater data; and 2) requested that ARC perform the planned geotechnical and geochemical characterization activities described by ARC in a letter dated April 1, 2010 (EPA will provide comments on the geochemical characterization activities).
- Continued the evaluation of flow monitoring equipment for the FMS.
- Initiated responses to EPA comments on the FMS elements of the Draft O&M Plan and initiated the revised FMS O&M Plan requested by EPA in a letter dated June 16, 2010.
- Completed the Electrical Hazards Removal Action.
- Conducted sampling of transite pipe scale samples for radiochemical analyses and leachate testing of the scale using the Meteoric Water Mobility Procedure pursuant to EPA-suggested revisions to the Supplemental Scale Sampling and Analysis Plan (SAP) dated April 23, 2010. Continued discussions with EPA regarding the Transite Pipe Removal Action.
- Submitted the revised Evaporation Ponds Removal Action Implementation Work Plan dated June 18, 2010, which addresses interim covers for the Thumb Pond and Sub-Area A.
- Submitted the Draft Cover Materials Work Plan dated June 25, 2010.
- Compiled VLT chemical and XRF data, and initiated preparation of a data summary report.
- Attended a meeting with EPA on June 16 to discuss the Process Areas Radiological Removal Action Work Plan. Initiated the preparation of a draft Process Areas Radiological Materials Removal Action Plan.

Planned July/August 2010 Activities

Site Characterization

- Continue Site wildlife surveys, maintenance of wildlife observation data and preparation of wildlife observation reports.
- Continue groundwater elevation and pit lake level monitoring. Continue meteorological monitoring at AM-6.
- Initiate the 2Q 2010 monitor well and domestic well reports. Submit the revised Domestic Well Monitoring Plan - Revision 3 (QAPP Revision) in early July.
- Provide updates to EPA for domestic well access agreements, as needed.
- Submit a draft technical memorandum on the aquifer test results for EPA review, and discuss with EPA the next steps described in the PWS Characterization Work Plan Addendum dated February 17, 2020.. Perform particle tracking and numerical modeling per EPA direction.
- Meet with EPA to discuss additional monitor wells to be installed to assess both background conditions and potential past or current sources of contaminants at the Site.
- Continue borehole drilling, zonal sampling and monitor well installations pursuant to the revised 2010 Monitor Well and Ag Fields Work Plans.
- Submit the revised Process Areas Vadose Zone and Groundwater Characterization Work Plan.

AOC Removal Actions

- Continue routine O&M, site security, and bird deterrent activities.
- Continue flow monitoring and water balance calculations for the Arimetco FMS.
- Respond to EPA comments and submit the revised FMS O&M Plan.
- Conduct geotechnical and geochemical characterization of sub-grade materials (mineral salt precipitates and native materials) within the north cell of the PWS evaporation pond upon receipt of EPA comments on the geochemical sampling approach.
- Discuss with EPA the results of the revised Supplemental Scale Sampling and Analysis Plan (SAP) and submit a revised Transite Pipe Removal Action Plan. As needed, meet with EPA to discuss details associated with the removal action.
- Pending EPA approval, initiate the field work described in the draft Cover Materials Work Plan.
- Conduct a Site visit with EPA on July 9 for the Electrical Hazards Removal Action.
- Submit the VLT XRF Characterization Data Summary Report.
- Submit the Process Areas Radiological Materials Removal Action Plan on July 6.
- Continue to contractor procurement activities associated with the removal actions.

If you have any questions or comments, please feel free to contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com.

Sincerely,



Jack Oman
Project Manager

cc: Dave Seter, EPA – via electronic mail
Jacquelyn Hayes, EPA – via electronic mail
Svetlana Zenkin, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Claire Trombadore, EPA – via electronic mail
Jere Johnson, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Joe Sawyer, NDEP – via electronic mail
Tom Olsen, BLM – via electronic mail
Dan Newell, City of Yerington – via electronic mail
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Dennis Stark, Lyon County Manager – via electronic mail
Richard Faber, Lyon County Facilities Engineering – via electronic mail
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